## STIC Biotechnology Systems Branch

## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

| Application Serial Number: | 10/554.194 |
|----------------------------|------------|
| Source:                    | Pollo      |
| Date Processed by STIC:    | 11/1/05    |
| •                          |            |

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.2.2 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
   U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
   Alexandria, VA 22314

Revised 01/24/05

## Raw Sequence Listing Error Summary

| ERROR DETECTED                    | SUGGESTED CORRECTION SERIAL NUMBER: 10/554,194   |
|-----------------------------------|--|
|                                   | : PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE  |
|                                   | The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3: this will prevent "wrapping."   |
| 2Invalid Line Length              | The rules require that a line not exceed 72 characters in length. This includes white spaces.  |
| 3Misaligned Amino Numbering       | The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers: use space characters, instead.  |
| 4Non-ASCII                        | The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.   |
| 5Variable Length                  | Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.   |
| 6PatentIn 2.0 "bug"               | A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences. |
| 7Skipped Sequences<br>(OLD RULES) | Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped                                    |
|                                   | Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.  |
| 8 Skipped Sequences (NEW RULES)   | Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000  |
| Use of n's or Xaa's (NEW RULES)   | Use of n's and/or Xaa's have been detected in the Sequence Listing.  Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.   |
| 0Invalid <213><br>Response        | Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence  |
| lUse of <220>                     | Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)                                       |
| "bug"                             | Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.  |
| 3 Misuse of n/Xaa                 | "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid   |
|                                   |  |



PCT

RAW SEQUENCE LISTING

3 <110> APPLICANT: Japan Science and Technology Corporation

DATE: 11/01/2005

PATENT APPLICATION: US/10/554,194

TIME: 10:55:20

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\11012005\J554194.raw

```
W--> 4 <120> TITLE OF INVENTION: Probes for Detection and Quantification of Lipid Second
Messengers and
              Method for Detecting and Quantifying Lipid Second Messengers Using the Same
W--> 5
W--> 6 <130> FILE REFERENCE: 03-F-088PCT
C--> 7 <140> CURRENT APPLICATION NUMBER: US/10/554,194
                                                                   Sel tem for Ever
furmay
furmay
Does Not Comply
onected Diskette Needs
C--> 7 <141> CURRENT FILING DATE: 2005-10-24
W--> 7 <160> NUMBER OF SEQ ID: 6
ERRORED SEQUENCES
W--> 8 <210> SEQ ID NO: 1
     9 <211> LENGTH: 5
     10 <212> TYPE: DNA
     11 <213> ORGANISM: Artificial Sequence
                                                                         pp1-2
W--> 12 <220> FEATURE:
     12 <223> OTHER INFORMATION: Synthesized Oligonucleotide
13 <400> SEQUENCE: 1
14 (Page 1) Invalid hucleic acid disignation
5
E--> 13 <400> SEQUENCE: 1
E--> 14 (eaaar
     15 <210> SEQ ID NO:
     16 <211> LENGTH: 30
     17 <212> TYPE: DNA
     18 <213> ORGANISM: Artificial Sequence
W--> 19 <220> FEATURE:
     19 <223> OTHER INFORMATION: Synthesized Oligonucleotide
E--> 20 <400> SEQUENCE: 2
                                                                     30 ) invalid
E--> 21 (eaaar (eaaar (eaaar (eaaar (eaaar (eaaar (eaaar
     22 <210> SEQ ID NO: 3
     23 <211> LENGTH: 32
     24 <212> TYPE: DNA
     25 <213> ORGANISM: Artificial Sequence
W--> 26 <220> FEATURE:
     26 <223> OTHER INFORMATION: Synthesized Oligonucleotide
E--> 28 Gaaar Gaaar Gaaar ggeaa areaa areaa ar
E--> 27 <400> SEQUENCE: 3
                                                                       32
     30 <211> LENGTH: 35
     31 <212> TYPE: DNA
     32 <213> ORGANISM: Artificial Sequence
W--> 33 <220> FEATURE:
     33 <223> OTHER INFORMATION: Synthesized Oligonucleotide
E--> 34 <400> SEQUENCE: 4
          Caaar Caaar Caaar Caaar Caaar Caaar Caaar Mushid
                                                                        35
```

RAW SEQUENCE LISTING DATE: 11/01/2005
PATENT APPLICATION: US/10/554,194 TIME: 10:55:20

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\11012005\J554194.raw

```
36 <210> SEQ ID NO: 5
     37 <211> LENGTH: 11
     38 <212> TYPE: DNA
     39 <213> ORGANISM: Artificial Sequence
W--> 40 <220> FEATURE:
     40 <223> OTHER INFORMATION: Synthesized Oligonucleotide
E--> 41 <400> SEQUENCE: 5
E--> 42 agang Ipcvv m
                                                            11
   43 <210> SEQ ID NO: 6
     44 <211> LENGTH: 11
     45 <212> TYPE: DNA
     46 <213> ORGANISM: Artificial Sequence
W--> 47 <220> FEATURE:
     47 <223> OTHER INFORMATION: Synthesized Oligonucleotide
E--> 48 <400> SEQUENCE: 6
                               -) involid
                                                            11
E--> 49
          dgsmg (l)cvv m
E--> 52 (1/2
```

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/554,194

DATE: 11/01/2005 TIME: 10:55:21

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\11012005\J554194.raw

L:4 M:283 W: Missing Blank Line separator, <120> field identifier L:6 M:283 W: Missing Blank Line separator, <130> field identifier L:7 M:270 C: Current Application Number differs, Replaced Current Application No L:7 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:7 M:283 W: Missing Blank Line separator, <160> field identifier L:8 M:283 W: Missing Blank Line separator, <210> field identifier L:12 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1 L:13 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:1 L:13 M:283 W: Missing Blank Line separator, <400> field identifier L:14 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1 L:19 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2 L:20 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:2 L:20 M:283 W: Missing Blank Line separator, <400> field identifier L:21 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:6 ( L:26 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3 L:27 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:3 L:27 M:283 W: Missing Blank Line separator, <400> field identifier L:28 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:6 L:33 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4 L:34 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:4 L:34 M:283 W: Missing Blank Line separator, <400> field identifier L:35 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:7 L:40 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:5 L:41 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:5 L:41 M:283 W: Missing Blank Line separator, <400> field identifier L:42 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:3 L:47 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:6 L:48 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:6 L:48 M:283 W: Missing Blank Line separator, <400> field identifier L:49 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:3 L:52 M:254 E: No. of Bases conflict, LENGTH:Input:2 Counted:12 SEQ:6 L:52 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:2 L:52 M:252 E: No. of Seq. differs, <211> LENGTH:Input:11 Found:12 SEQ:6